2N5457 2N5458 2N5459

SILICON N-CHANNEL JFETS



www.centralsemi.com

The CENTRAL SEMICONDUCTOR 2N5457, 2N5458, and 2N5459 are silicon N-Channel JFETs designed for switching and amplifier applications.



MARKING: FULL PART NUMBER

| MAXIMUM RATINGS: (T _A =25°C) | SYMBOL | | UNITS |
|--|------------------------------------|-------------|-------|
| Drain-Source Voltage | V_{DS} | 25 | V |
| Drain-Gate Voltage | V_{DG} | 25 | V |
| Gate-Source Voltage | V_{GS} | 25 | V |
| Continuous Gate Current | I_{G} | 10 | mA |
| Power Dissipation | P_{D} | 310 | mW |
| Operating and Storage Junction Temperature | T _{.J} , T _{sta} | -65 to +150 | °C |

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

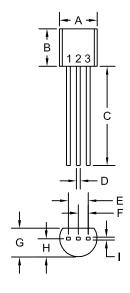
| | | 2N: | <u>2N5457</u> | | <u>2N5458</u> | | <u>2N5459</u> | |
|----------------------|---|------|---------------|------|---------------|------|---------------|-------|
| SYMBOL | TEST CONDITIONS | MIN | MAX | MIN | MAX | MIN | MAX | UNITS |
| IGSS | V _{GS} =15V | - | 1.0 | - | 1.0 | - | 1.0 | nA |
| I _{GSS} | V _{GS} =15V, T _A =100°C | - | 200 | - | 200 | - | 200 | nA |
| IDSS | V _{DS} =15V | 1.0 | 5.0 | 2.0 | 9.0 | 4.0 | 16 | mA |
| BVGSS | I _G =10μA | 25 | - | 25 | - | 25 | - | V |
| V _{GS(OFF)} | V_{DS} =15V, I_D =10nA | 0.5 | 6.0 | 1.0 | 7.0 | 2.0 | 8.0 | V |
| C _{rss} | V_{DS} =15V, V_{GS} =0, f=1.0MHz | - | 3.0 | - | 3.0 | - | 3.0 | pF |
| C _{iss} | V_{DS} =15V, V_{GS} =0, f=1.0MHz | - | 7.0 | - | 7.0 | - | 7.0 | pF |
| 9 _{fs} | V_{DS} =15V, V_{GS} =0, f=1.0kHz | 1.0K | 5.0K | 1.5K | 5.5K | 2.0K | 6.0K | μS |
| 9 _{os} | V_{DS} =15V, V_{GS} =0, f=1.0kHz | - | 50 | - | 50 | - | 50 | μS |

2N5457 2N5458 2N5459

SILICON **N-CHANNEL JFETS**



TO-92 CASE - MECHANICAL OUTLINE



| DIMENSIONS | | | | | | |
|------------|--------|-------|-------------|------|--|--|
| | INCHES | | MILLIMETERS | | | |
| SYMBOL | MIN | MAX | MIN | MAX | | |
| A (DIA) | 0.175 | 0.205 | 4.45 | 5.21 | | |
| В | 0.170 | 0.210 | 4.32 | 5.33 | | |
| С | 0.500 | - | 12.70 | - | | |
| D | 0.016 | 0.022 | 0.41 | 0.56 | | |
| Е | 0.100 | | 2.54 | | | |
| F | 0.050 | | 1.27 | | | |
| G | 0.125 | 0.165 | 3.18 | 4.19 | | |
| Н | 0.080 | 0.105 | 2.03 | 2.67 | | |
| | 0.015 | | 0.38 | | | |

TO-92 (REV: R1)

LEAD CODE:

- 1) Drain 2) Source
- 3) Gate

R1

MARKING:

FULL PART NUMBER

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free guick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- · Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA

Main Tel: (631) 435-1110 Main Fax: (631) 435-1824

Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

Worldwide Distributors:

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centralsemi.com/terms

www.centralsemi.com (001)